

Amendment to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A breath alcohol detection device comprising:

A) a breath inlet passage having an inlet port;
B) a pressure sensor in communication with the breath inlet passage to generate a pressure signal responsive to the pressure in the breath inlet passage;

C) a fuel cell;

D) a vent passage communicating the breath inlet passage to atmosphere;

~~E) a two flow position valve having a valve inlet in communication with the breath inlet passage, a first outlet, a second outlet, and an operator to shift the valve from a first flow position where the valve connects the valve inlet to the first valve outlet and a second flow position where the valve connects the valve inlet to the second valve outlet;~~

E) a two position valve having a valve inlet connected to the breath inlet passage between the inlet port and the vent passage, first and second valve outlets, a valve member moveable from a first position connecting the valve inlet to the first outlet and disconnecting the valve inlet from the second valve outlet and a second position connection the valve inlet to the second valve outlet and disconnecting the valve inlet from the first valve outlet, wherein the valve

inlet is always connected to only one of the valve outlets depending upon the position of the valve member;

F) a first passage ~~communicating~~ extending from the first valve outlet to atmosphere, and a first restriction in such passage;

G) a second passage ~~communicating~~ extending from the second valve outlet to atmosphere through the fuel cell, and a second restriction in such second passage, said first restriction generally equaling said second restriction; and

H) an actuator for shifting the valve member from the first ~~flow~~ position to the second ~~flow~~ position for ~~an a~~ a short interval to flow a volume of breath from the breath inlet passage through the valve, ~~through~~ along the second passage and into the fuel cell to generate a fuel cell output signal proportional to the alcohol contained in the ~~sample~~ volume of breath, the actuator normally maintaining the valve member in the first position, wherein ~~shifting of the valve between the first and second positions does not substantially vary the pressure in the breath inlet passage~~ a portion of breath flowed through the breath inlet passage continuously flows through the valve, one only of said first or second passages and one of the restrictions so that the pressure in the breath inlet passage does not substantially vary when the valve member shifts between the first and second positions.

2. (currently amended) The breath alcohol detection device as in claim 1 wherein ~~said the~~ the vent passage has a flow area larger than the flow area of ~~the first~~ either restriction.

3. (original) The breath alcohol detection device as in claim 2 wherein the flow area of said first restriction is about 7.3 percent of the flow area of the vent passage.

4. (original) The breath alcohol detection device as in claim 3 wherein the flow area of the first restriction is about 0.00038 square inches and the flow area of the vent passage is about 0.0052 square inches.

5. (original) The breath alcohol detection device as in claim 1 including a body, said passages located in said body, a vent recess in the body, said vent passage and first passage opening in said vent recess, and said second passage opening away from said vent recess.

6. (currently amended) The breath alcohol detection device as in claim 5 including a cover on the body, the cover overlying the vent recess, and one or more vent openings in the cover located over the vent recess.

7-15. (canceled)

16. (currently amended) A breath alcohol detection device including a body having an exterior surface; a plurality of recesses formed in the ~~body~~ exterior surface including a pressure sensor recess, a valve recess, a fuel cell recess and a vent recess; a pressure sensor in the pressure sensor recess; a two position valve in the valve recess; a fuel cell in the fuel cell recess; a breath inlet passage in the body having an inlet port at the body surface; a vent passage in the body extending from the breath inlet passage to the vent recess; a pressure sensor passage in the body extending from the breath inlet passage to the pressure

sensor; said valve having ~~an~~ a valve inlet and first and second valve outlets, and a valve member shiftable between a first position connecting the valve inlet and the first valve outlet only and disconnecting the valve inlet from the second valve outlet and a second position connecting the valve inlet and the second valve outlet only and disconnecting the valve inlet from the first valve outlet, the valve inlet ~~in communication with~~ connected to the breath inlet passage; a first passage in the body ~~extending from a~~ connecting the first valve outlet to the fuel cell; a second passage in the body ~~extending from~~ connecting the second valve outlet to the vent recess; each of said pressure sensor, valve and fuel cell including electrical leads, all of said leads extending away from said body, wherein breath from the breath inlet passage continuously flows through the valve and through either the first passage or the second passage only depending upon the ~~flow~~ position of the valve member.

17. (original) The breath alcohol detection device as in claim 16 wherein said pressure sensor, valve and fuel cell are located substantially at or below the surface of the body.

18. (original) The breath alcohol detection device as in claim 16 including a cover surrounding said body, said cover overlying said vent recess, and including vent openings in said cover over such recess.

19. (original) The breath alcohol detection device as in claim 18 including a third passage in the body, said third passage extending from the fuel cell to the surface of the body away from the vent recess.

20. (original) The breath alcohol detection device as in claim 18 wherein said body comprises a block and is formed from a plastic material.

21. (original) The breath alcohol detection device as in claim 18 wherein said body includes a number of faces, said pressure sensor, valve and fuel cell located in said body substantially below said faces.

22. (original) The breath alcohol detection device as in claim 16 including a temperature sensor located in said breath inlet passage, said pressure sensor including leads extending through said body and away from said body.

23-24. (canceled)

25. (original) The breath alcohol detection device as in claim 1 wherein said interval is about 0.25 seconds, or less.

26. (currently amended) The breath alcohol detection device as in claim 16 including an actuator for shifting the valve member to connect the valve inlet to the first valve outlet for about 0.25 seconds, or less.

27. (new) The breath alcohol detection device as in claim 16 including an actuator to shift the valve member from the first position to the second position for a short interval of time to flow breath from the vent passage through the fuel cell during the interval.

28. (new) The breath alcohol detection device as in claim 16 including a first restriction in the fuel cell and a second restriction in the second passage, said first restriction generally equaling said second restriction.